

# **Re-Roofing**

The International Building Code (IBC) Section 1510 and the International Residential Code (IRC) Section R907 require a building permit for re-roofing. The primary purpose of the reroofing permit is to help ensure that the integrity of the existing roof framing and sheathing is adequate to receive the new roof installation. To achieve this purpose, the applicant must call for a progress inspection prior to cover for any framing members that are replaced and for proper sheathing attachment. Furthermore, by code the applicant must provide access to and means for inspection of the work as follows:

Provide a secured ladder to the roof or an alternate means that would allow for a visual inspection of the work, or reasonable portion thereof, as determined by the inspector.

Provide individual fall protection equipment and fall arrest gear to cover fall hazards in excess of ten feet for the inspector where walking on the roof surface is deemed necessary to accomplish the inspection.

City of Shoreline Ordinance 355 Section 3 exempts certain re-roofing projects from obtaining a permit. A permit is not required for re-roofing when:

Replacement of the plywood/sheathing is not more than 200 square feet, or 15% of the roof area, whichever is greater.

Roofing that adds less than 5 pounds per square foot of dead load to the existing roof.

New roofing material for commercial structures is of an equal or better fire rating.

Note: There shall be no replacement or modifications of structural supporting members without a building permit.

#### **Concerns with re-roofing:**

- The plywood or skip sheathing is part of the lateral restraint system, and is considered a structural element. If plywood has the incorrect span rating or is not attached properly, it can affect structural stability of the structure.
  - Replaced plywood should be fastened with a minimum of 8d common nails or 16ga staples (1 3/4" long with a 7/16" crown). Fastener spacing shall be 6"oc. at panel edges and 12"oc. in the field. Additional fasteners may be required for lateral loads. Replaced skip sheathing shall be fastened with (2) 8d common nails or (2) ga staples (1-3/4" long with a 7/16" crown).
- Adding heavier roofing material that adds an additional 5 pounds per square foot to the roof requires structural analysis to assure adequacy of the existing structure.

Examples of heavier roofing materials would be Spanish tiles, slate, concrete or earthen/sod.

### • Flashing not installed or installed improperly.

Flashing helps prevent water from entering the building and varies depending on the roofing material. Typically chimneys wider than 30" require a cricket. Drip edge, valley, sidewalls and other vertical surfaces all require flashing. Check the manufacturer's installation guidelines found on each packet of roofing.

#### • Underlayment (tar paper/ felt) not lapped properly.

Typically the underlayment should be lapped 4" at the vertical seams and 2" at the horizontal seams. Special installation requirements are required on roofs that slope less than 2:12. Check the manufacturer's installation guidelines found on each packet of roofing material.

## • Roof ventilation is inadequate.

When new roofing materials are installed, ventilation of the roof is required to help prevent damage from water vapor and condensation. Roof ventilation should be calculated at rate of 1 sq. ft. of net vent area for every 150 sq. ft. of roof area. Some roof jacks provide less than 1/2 sq. ft. of net vent area. Each roof jack has the amount of vent area listed on the jack.

# • Existing clothes dryer, bathroom and kitchen exhaust fan ducting that is not connected to a dedicated roof vent.

Exhaust fans vented into the attic must be connected to a dedicated roof jack to allow moist air to be vented directly to the exterior. During the removal of the existing roofing material dedicated roof jacks are sometimes disconnected from the ductwork and are not reconnected. All exhaust fans that vent into the attic are required to vent to the exterior.

- Commercial structures may have a fire rating required for the roofing material.

  Depending on the occupancy classification and the construction type the required fire rating of the new roofing will need to be verified.
- Roofing material not installed per the manufacturer's specifications or per code. Each packet of roofing material typically comes from the manufacturer with the installation requirements. These installation guidelines are typically code compliant. If the material is not installed per the specifications the warranty of the roofing material may be affected.

#### Recovering versus replacement of roofing.

Wood shakes, slate, clay, cement or asbestos-cement tiles are required to be removed. Recovering of other roofing materials is permitted provided there are not more than two existing layers. If the existing roofing material is deteriorated or water-soaked as to not provide an adequate base for the new material the existing roof material is required to be removed.